

## ABSTRACT

An object of the present invention is to obtain a plasma-generation power-supply device that is capable of driving with a power factor as high as possible in a maximum rated condition and of keeping stable operation even when the applied power is varied. A plasma-generation power-supply device of the invention includes a transformer (TR) connected to an alternating-current power-supply (PS), a rectifier (RE) connected to the transformer (TR), an inverter (IV) connected to the rectifier (RE), a reactor (FL) inserted in series in the power line of an ozonizer (1) that is supplied with power from the inverter (IV), and a controller (CT) that controls the inverter (IV). The controller (CT) detects the current flowing to the ozonizer (1) with a current detector (DT) and provides control to keep constant the applied power to the ozonizer (1).